UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/791,165	03/02/2004	Thomas Fink	SAW0027	3398
832 BAKER & DAI	7590 11/06/200 NIELS LLP	EXAMINER		
111 E. WAYNE	E STREET	KNOX, STEWART		
	SUITE 800 FORT WAYNE, IN 46802		ART UNIT	PAPER NUMBER
			3641	
			MAIL DATE	DELIVERY MODE
			11/06/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
	10/791,165	FINK ET AL.
Office Action Summary	Examiner	Art Unit
	Stewart T. Knox	3641
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet with the	correspondence address
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING D. - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period of Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATIO 36(a). In no event, however, may a reply be till apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE	N. mely filed the mailing date of this communication. ED (35 U.S.C. § 133).
Status		
1) Responsive to communication(s) filed on <u>25 O</u>	action is non-final. nce except for formal matters, pre	
Disposition of Claims		
4) ☐ Claim(s) 2-20 and 22-45 is/are pending in the 4a) Of the above claim(s) 12-17,24-29 and 34-5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 2-11,18-20,22,23,30-33,44 and 45 is/7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or	4 <u>3</u> is/are withdrawn from consided	eration.
Application Papers		
9) The specification is objected to by the Examine 10) The drawing(s) filed on is/are: a) acc Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Example 11.	epted or b) objected to by the drawing(s) be held in abeyance. Se tion is required if the drawing(s) is ob	e 37 CFR 1.85(a). jected to. See 37 CFR 1.121(d).
Priority under 35 U.S.C. § 119		
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority application from the International Burea * See the attached detailed Office action for a list	s have been received. s have been received in Applicat rity documents have been receiv u (PCT Rule 17.2(a)).	ion No ed in this National Stage
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail D 5) Notice of Informal I 6) Other:	ate

Art Unit: 3641

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 10/25/2007 have been fully considered but they are not persuasive.

- Applicant argues that Flickinger does not describe a stampable base plate and that claim
 44 is therefore not anticipated by Flickinger.
- 3. To support the assertion that the base plate of Flickinger is not stampable, applicant cites three points: (1) the base plate is not described has having a stampable thickness, (2) plate 8 in Flickinger is obviously quite thick and therefore not capable of being stamped, and (3) an assertion that the appropriate stampable thickness is at most 1 cm. (An additional reference, US Pub No 2004/079545, is cited where the thickness is 2.5 cm and it is not produced by a stamping process).
- 4. In response to (1), it is first noted that the term "stampable" is a functional use recitation, reciting only that the structure is capable of being stamped. A patent need not describe every possible use or function of its structure, especially when that use is inherent to its structure. Any metal base plate can be "stamped," independent of whether or not the process succeeds in producing a hole through the plate. Thus Flickinger is not required to specifically disclose that the structure is "stampable" any more than they are required to disclose that the structure is portable, breakable, or capable of being written on.
- 5. In response to (2), Applicant appears to be attempting to determine the size and relative dimensions of the drawings by sight alone. First, it is noted that drawings in patents are not presumed to be drawn to scale. Second, Flickinger does not recite any dimensions in the

Art Unit: 3641

disclosure and does not state that the structure is produced by some other means, and thus gives no teaching that the structure is NOT in an appropriate stampable range.

- 6. In response to (3), applicant has asserted that an appropriate stamping thickness is at most 1 cm. Assuming *in arguendo* that this is the case, it is again noted that Flickinger provides no indication that the thickness of metal base plate (a) is greater than 1 cm, or (b) cannot be produced by a stamping process.
- 7. Applicant is additionally put on notice that the word "stampable" can also be interpreted as being "stamped" in the context of a rubber-stamp which merely is used to apply print to the surface of a product.

Claim Rejections - 35 USC § 103

8. Claim 44, 45, 2-10, 23, and 30-33 are rejected under 35 U.S.C. 103(a) as being obvious over Flickinger (5,732,634). Flickinger discloses a bushing assembly capable of use with igniters of airbags or belt tensioner pulleys, comprising a metal base plate (figure 5, element 8) having a thickness and having an opening therein (in which element 9' is placed), said base plate being formed by a single element, at least two metal pins (10) in parallel arrangement extending from the rear side of the base plate and being fixed in the opening by a glass plug fixing material (9', col. 5 lines 60-65) in the opening, or firmly connected with the fixing material, or sealed with the fixing material, where the retention structure comprises at least one positive interlocking connection (pictured on the left side of the opening in figure 5) between the fixing material and a part of the opening. One of the metal pins is also grounded to a rear side of the base plate, or in a socket of the base plate that is grounded.

Art Unit: 3641

9. Flickinger discloses retention structure being provided between the front and rear sides of the base plate for prevention of motion of the fixing material relative to the base in a direction toward the rear side along the inner circumference of the opening (shelf portion of the plate where it contacts 9', unlabeled), where the retention structure is an integral component of the base plate or forms a structural unit with the base plate.

- 10. Flickinger further discloses the retention structure comprising at least one undercut between the rear and front side on the inner circumference of the opening in the base plate, wherein the undercut is formed by at least one projection (the shelf, unlabeled).
- 11. Flickinger further discloses two sub-areas, the second with lesser inner dimensions than the first, wherein the projection is formed by the second sub-area and both sub-areas have unchanging geometry with constant inner dimensions over their length.
- 12. Product-by-process claims are not limited to the manipulations of the recited steps, only the structure implied by the steps; "even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." *In re Thorpe*, 777 F.2d 695, 227 USPQ 964. Regarding the process for making the claimed opening and the glass plug or the **Product by Process** Claims, applicant is directed to MPEP § 2113. Therefore opening being formed by at least one separation process and the glass plug being formed from molten glass is not pertinent in this instance to the patentability of this product claim.

Art Unit: 3641

13. Flickinger does not expressly disclose that the base plate thickness is stampable. However, such a limitation as discussed in the arguments section amounts only to a recitation that the device is capable of being stamped, which is a function of size. Flickinger does not state that the plate 8 is required to be of a certain thickness for any particular function. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to make a base plate of stampable thickness (e.g. 1 cm), since such a modification would have involved a mere change in the size of a component. A change in size is generally recognized as being within the level of ordinary skill in the art. *In re Rose*, 105 USPO 237 (CCPA 1955).

- 14. Claims 11 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Flickinger as applied to claims 44, 8, and 9 above, and further in view of Junji (WO 03083404). Flickinger teaches the claimed invention except for sub-areas with variable geometry or a plurality of projections. Junji teaches two or more sub-areas with variable geometry (all figures), some of which includes a plurality of projections arranged circumferentially about said pin at a location between the front and rear sides (figures 10 and 11). Junji does not explicitly state why this is done, but it appears to be in order to provide different analogous means for fitting the plug in the base plate. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the retention structure of Flickinger to have many varying shapes including a number of projections as taught by Junji since such a modification would provide the retention structure with equivalent retaining functions in an analogous art setting.
- 15. Claims 19 and 20 are rejected under 35 U.S.C. 103(a) as being obvious over Flickinger and Junji as applied to claims 44, 8, and 9 above. Flickinger and Junji disclose the claimed

Art Unit: 3641

invention but do not expressly disclose the opening being either a circular or non-circular cross section. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the opening as taught by Flickinger and Junji to be either circular or non-circular, because Applicant has not disclosed that a circular or non-circular opening provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well with any reasonably shaped opening, because it provides for accommodation of many differently shaped fixing plugs or variable geometry metal pins, and since it appears to be an arbitrary design consideration which fails to patentably distinguish over Flickinger or Junji.

- 16. Therefore, it would have been an obvious matter of design choice to modify Flickinger or Junji to obtain the invention as specified in the claims.
- 17. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Flickinger as applied to claim 44 above, and further in view of Kubozuka (US Pub No 2002/0174792). Flickinger teaches the claimed invention except for the metal base plate being polished. Kubozuka teaches polishing the metal base plate of an igniter assembly (paragraph 47). Kubozuka does not explicitly say why this is done, but it appears that it is done in order to ensure that the electrical and physical connections between other parts and the plate are good and clean. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the metal base plate of Flickinger to be polished as taught by Kubozuka, since such a modification would provide the metal base plate with a better electrical connection to its constituent parts.

Art Unit: 3641

Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Stewart T. Knox whose telephone number is (571) 272-8235.

The examiner can normally be reached on Monday through Thursday, 8:00 AM to 6:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Michael Carone can be reached on (571) 272-6873. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would

like assistance from a USPTO Customer Service Representative or access to the automated

information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Stewart Knox/

/Michael J. Carone/

Supervisory Patent Examiner, Art Unit 3641